MONROE COUNTY

JOB DESCRIPTION

Position Title: ENGINEERING CAD TECHNICIAN

Date: 08/03/05

Position Level: 9 | FLSA Status: Nonexempt | Class Code: 9-40

GENERAL DESCRIPTION

Moderately complex technical engineering position of responsibility involving all facets of technical drawing. Functions of this position require the preparation and development of complete and detailed working drawings, sketches, etc., for architectural and engineering projects of all types. Assignments are performed under the general direction of the County Engineer or his designee.

KEY RESPONSIBILITIES

- 1. *Prepares and develops complete and detailed working drawings for roadway construction, resurfacing and widening projects that contain key sheets, drainage maps, typical sections, drainage structures, roadway plan and profile, roadway cross sections, intersection details, utility locations, maintenance of traffic plans, etc.*
- 2. *Prepares and develops complete and detailed working drawings for building construction, renovation, and maintenance projects, including site work, drainage details, structural, mechanical, electrical, storm and sanitary sewage systems, water distribution, etc.
- 3. *Prepares and develops complete and detailed working drawings for recreation projects at parks and beaches, bridge construction and repair projects, parking log projects, drainage projects, etc.
- 4. Prepares and develops moderately complex technical drawings for the submission of permit applications to various agencies.
- 5. Prepares "as-built" drawings for all projects.
- 6. Prepares survey drawings by transcribing field notes.
- 7. Prepares conceptual drawings, front and side elevations, floor plans, isometrics, perspectives and renderings, orthographic projections, etc....
- 8. Produces sketches and other items of an art nature for posters, seals, plaques, scrolls, certificates, etc....
- 9. Prepares letters and reports as necessary.
- 10. Indicates and researches records.
- 11. Performs related work such as preparing cost estimates for materials, labor and equipment for engineering projects and works with vendors on various projects.
- * Indicates an "essential" job function.

The information on this description has been designed to indicate the general nature and level of work performed by employees within this classification. It is not designed to contain or be interpreted as a comprehensive inventory of all duties, responsibilities and qualifications required of employees assigned to this job.

| KEY JOB REQUIREMENTS | | | | | | |
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| Education: | Associate's Degree or Two Year College equivalent required. | | | | | |
| Experience: | Three to five years of progressive drafting experience, or equivalent. Employee should possess previous experience with Autocad. Must possess valid Florida Drivers License. | | | | | |
| Impact of Actions: | Makes recommendations or decisions which usually affect the assigned department, but may at times affect operations, services, individuals, or activities of others outside of the assigned department. | | | | | |
| Complexity: | Analytic: Work is non-standardized and widely varied requiring the interpretation and application of a substantial variety of procedures, policies, and/or precedents used in combination. Frequently, the application of multiple, technical activities is employed; therefore, analytical ability and inductive thinking are required. Problem solving involves identification and analysis of diverse issues. | | | | | |
| Decision Making: | Analytic: Supervision is present to establish and review broad objectives relative to basic position duties or departmental responsibilities. Independent judgment is required to study previously established, often partially relevant guidelines; plan for various interrelated activities; and coordinate such activities within a work unit or while completing a project. | | | | | |
| Communication with Others: | Requires regular internal and external contacts to carry out programs and to explain specialized matters. Occasionally requires contact with officials at higher levels on matters requiring cooperation, explanation and persuasion, as well as with the public involving the enforcement of regulations, policies and procedures. | | | | | |
| Managerial Skills: | Responsible for orienting and training others, and assigning and reviewing their work. May also be responsible for acting in a "lead" or "senior" capacity over other positions performing essentially the same work, or related technical tasks and reporting to a higher level on a formal basis. | | | | | |
| Working Conditions/ Physical Effort: | Normal office situation. Works alone or closely with others. Regular exposure to moving machinery and/or vehicles. Regular exposure to chemicals, solvents, fumes and/or gases. Light lifting or carrying 25 lbs. or less. Requires good near or distant vision. Requires distinguising colors and/or depth perception. Typically sitting at a desk or table. Intermittently sitting, standing, stooping. | | | | | |
| On Call Requirements: | Requires thorough knowledge of all aspects of Autocad and drafting. Ability to draft by computer and freehand to produce high quality products; Knowledge of technical principles, practices, techniques and instruments of Architecture and civil engineering as they relate to roads, bridges, buildings, etc; Ability to communicate effectively and efficiently verbally and in writing; Ability to carry out assignments independently and completely. | | | | | |

| APPROVALS | | | | | | | |
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| Department | t Head: | | | | | | |
| Name: | N/A | Signature: | | Date: | | | |
| Division Director: | | | 111 | | | | |
| Name: | David S. Koppel, PE | Signature: | OH - | Date: 9-2-05 | | | |
| County Adn | ninistrator: Tom W.II. | | NI | 9/2/05 | | | |

| Name: | Thomas J. Willi | Signature: | | Date: | |
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| On this date | e I have received a copy of m | y job description rel | ating to my employment v | vith Monro | e |
| County. Name: | Pene Charka | Signature: | n | Date: | 9/8/5 |
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